UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,134	11/19/2001	Richard Detweiler	EXTS113	6960

7590	02/26/2004	EXAMINER

Ormiston & McKinney, PLLC
802 W. Bannock, Suite 400
P.O. Box 298
Boise, ID 83701-0298

		HAMILTON, MONPLAISIR G

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*19 November 2001*</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-46*</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-46*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>*19 November 2001*</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date <u>2</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-46 are pending.

Information Disclosure Statement

2.   The information disclosure statement (IDS) submitted on 1/22/04 is in compliance with

the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being

considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 5, 7-8, 21, 23-24, 33-34 and 46 are rejected under 35 U.S.C. 102(b) as being

anticipated by US 6317754 issued to Peng, herein referred to as Peng.

Referring to Claims 5, 21 and 46:

Peng discloses a coordinated user-initiated synchronization method (col 3, lines 1-5),

comprising the acts of: detecting changes to a local application data store (col 5, lines 1-10);

identifying a record affected by a detected change (col 13, lines 30-40; col 16, lines 10-20);

ascertaining whether the identified record, in its current form as affected by the detected change,

has been replicated in or deleted from a remote application data store through push

synchronization (col 12, lines 45-60; col 17, lines 5-65); and if not, synchronizing the remote

application data store with the local application data store (col 15, lines 25-65; col 17, lines 45-

65).

Referring to Claim 33:

Peng discloses a coordinated push synchronization system, comprising a push module

and a reception module (Fig 3; col 14, lines 45-60), the push operable to push a record and a

local change counter associated with the record to the reception module (col 16, lines 10-30), the

reception module operable to compare the pushed local change counter with a remote change

counter and to update a remote application data store with the pushed record based upon the

comparison (col 17, lines 5-65).

Referring to Claims 7, 23:

Peng discloses the limitations of Claims 5, 21 above. Peng further discloses wherein the

act of synchronizing comprises: if the identified record has been detected as being new,

replicating the identified record in the remote application data store (col 17, lines 60-65); if the

identified record has been detected as being modified, replicating the identified record in the

remote application data store replacing a prior version of the record (col 17, lines 60-65); and if

the identified record has been detected as being deleted, deleting the version of the identified

record from the remote application data store (Fig 3; col 45-60;).

Referring to Claims 8, 24:

Peng discloses the limitations of Claims 5, 21 above. Peng further discloses an act of

altering a local change counter associated with a record affected by a detected change (col 16,

lines 10-25), and wherein the act of identifying comprises comparing a global change counter

associated with the affected record with the local change counter associated with the affected

record (col 6, lines 30-50; col 7, lines 35-45; col 11, lines 10-35).

Referring to Claim 34:

Peng discloses the limitations of Claims 33 above. Peng further discloses wherein the local and remote change counters each have a value and the reception module is operable to compare those values and update the remote application data store only if the values are not equal (col 17, lines 5-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-3, 10-11, 13-14, 17-19, 26-27, 29-30 and 45 are rejected under 35 U.S.C. 103(a)

as being unpatentable over US 6317754 issued to Peng, herein referred to as Peng.

Referring to Claims 1, 17 and 45:

Peng discloses a coordinated push synchronization method, comprising the acts of:

detecting changes to a local application data store (col 5, lines 1-10); identifying a record

affected by a detected change (col 13, lines 30-40; col 16, lines 10-20); pushing the identified

record (col 14, lines 45-60); and updating the remote application data store with the pushed

record (col 15, lines 25-65).

Peng does not explicitly disclose "ascertaining whether the identified record, in its

current form as affected by the detected change, has been replicated or deleted in a remote

application data store through **user-initiated synchronization**;". However, Peng discloses "[i]n

one embodiment, the primary servers are automatically and frequently synchronized in order to

maintain good data consistency among the primary server. On the other hand, the less reliable

synchronization from the secondary servers is controlled from the secondary servers so that

communication costs can be reduced and so that the document or other data will no be

synchronized unless authorized by the user at the secondary server (col 2, line 65-col 2, line 5).

At the time the invention was made, it would have been obvious to a person of ordinary skill in

the art to modify the teachings of Peng such that the system "ascertain[s] whether the identified

record, in its current form as affected by the detected change, has been replicated or deleted in a

remote application data store through **user-initiated synchronization/ user-authorized**

synchronization. One of ordinary skill in the art would have been motivated to do this because it

would allow the system to purge unnecessary updates (Peng: col 5, lines 5-25).

Referring to Claims 10 and 26:

Peng discloses a coordinated push and user-initiated synchronization method,

comprising: detecting changes to a local application data store (col 5, lines 1-10); identifying a

record affected by a detected change (col 13, lines 30-40; col 16, lines 10-20); if the identified

record is pushed (col 14, lines 45-60), and if a user initiates synchronization (col 3, lines 1-5),

ascertaining whether the identified record, in its current form as affected by the detected change,

has been replicated in or deleted from the remote application data store through push

synchronization (col 12, lines 45-60; col 17, lines 5-65); and, if not, synchronizing the remote

application data store with the local application data store (col 15, lines 25-65; col 17, lines 45-

65)..

Peng does not explicitly disclose ascertaining whether the identified record, in its current

form as affected by the detected change, has been replicated in or deleted from a remote

application data store through user-initiated synchronization and, if not, updating the remote

application data store with the pushed record. However, Peng discloses "[i]n one embodiment,

the primary servers are automatically and frequently synchronized in order to maintain good data

consistency among the primary server. On the other hand, the less reliable synchronization from

the secondary servers is controlled from the secondary servers so that communication costs can

be reduced and so that the document or other data will no be synchronized unless authorized by

the user at the secondary server (col 2, line 65-col 2, line 5). At the time the invention was made,

it would have been obvious to a person of ordinary skill in the art to modify the teachings of

Peng such that the system "ascertain[s] whether the identified record, in its current form as

affected by the detected change, has been replicated or deleted in a remote application data store

through **user-initiated synchronization/ user-authorized synchronization**. One of ordinary

skill in the art would have been motivated to do this because it would allow the system to purge

unnecessary updates (Peng: col 5, lines 5-25).

Referring to Claims 2, 18 and 27:

Peng discloses the limitations of Claims 1, 17 and 26 above. Peng further discloses the

act of ascertaining includes comparing a local change counter associated with pushed record with

a remote change counter, where values for the local and remote change counters are equal the

identified record, in its current form, has been replicated or deleted through user-initiated

synchronization (col 10, lines 1-10; col 12, lines 5-10; col 16, lines 10-60; col 17, lines 20-25).

Referring to Claims 3 and 13, 14, 19, 29 and 30:

Peng discloses the limitations of Claims 1, 10, 17 and 26 above. Peng further discloses

wherein the act of pushing the identified record comprises: if the identified record has been

detected as being new, pushing a replica of the identified record with instructions to save the

replica in the remote application data store (col 17, lines 60-65); if the identified record has been

detected as being modified, pushing a replica of the identified record with instructions to save the

replica in the remote application data store replacing a prior version of the record (col 17, lines

60-65); and if the identified record has been detected as being deleted, pushing instructions to

delete a prior version of the identified contained in the remote application data store (Fig 3; col

45-60;).

Referring to Claim 11:

Peng discloses the limitations of Claim 10 above. Peng further discloses wherein the act

of ascertaining whether the identified record has been replicated in or deleted from a remote

application data store through user-initiated synchronization includes comparing a local change

counter associated with the identified record with a remote change counter, the identified record,

in its current form, has been replicated or deleted through user-initiated synchronization where

values for the local and remote change counters are equal (col 3, lines 1-10; col 17, lines 1-65).

5.   Claims 4, 6, 9, 12, 15-16, 20, 22, 25, 28, 31-32, and 35-44 are rejected under 35 U.S.C.

103(a) as being unpatentable over US 6317754 issued to Peng, herein referred to as Peng further

in view of US 6581075 issued to Guturu, Parthasarathy et al, herein referred to as Guturu.

Referring to Claim 4, 15, 20, 31, 35:

Peng discloses the limitations of Claims 1, 10, 17, 26, 33 above.

Peng does not explicitly disclose "after updating the remote application data store, setting a coordination flag for the pushed record".

Guturu discloses after updating the remote application data store, setting a coordination flag for the pushed record (col 4, lines 60-66).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Peng such that a coordination flag is set for the pushed record (col 4, lines 30-40). One of ordinary skill in the art would have been motivated to do this because it would provide a system that can detect whether the an update has already taken place (Guturu: col 4, lines 30-65).

Referring to Claims 6 and 22:

Peng discloses the limitations of Claims 5 and 21 above.

Peng does not explicitly disclose "wherein the act of ascertaining includes examining a coordination flag associated with the identified record, a set coordination flag indicating that the identified record, in its current form, has been replicated in or deleted from the remote application data store through push synchronization and a reset coordination flag indicating that the identified record, in its current form, has not".

Guturu discloses the act of ascertaining includes examining a coordination flag associated with the identified record, a set coordination flag indicating that the identified record, in its current form, has been replicated in or deleted from the remote application data store through push synchronization and a reset coordination flag indicating that the identified record, in its current form, has not (col 4, lines 55-68)

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Peng such that a coordination flag is set for the pushed record (col 4, lines 30-40). One of ordinary skill in the art would have been motivated to do this because it would provide a system that can detect whether the an update has already taken place (Guturu: col 4, lines 30-65).

Referring to Claims 9 and 16, 25 and 32:

Peng discloses the limitations of Claims 5, 10, 21 and 26 above. Peng further discloses the acts of updating a value of a global change counter associated with the identified record to equal the value of a local change counter associated with the identified record (col 7, lines 35-50; Fig 4).

Peng does not explicitly disclose "resetting a coordination flag associated with the identified record".

Guturu discloses resetting a coordination flag associated with the identified record (col 5, lines 10-25).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Peng such that a coordination flag is reset for the identified record (col 4, lines 30-40). One of ordinary skill in the art would have been motivated to do this because it would provide a system that can detect whether the an update has already taken place (Guturu: col 4, lines 30-65).

Referring to Claim 12, 28:

Peng discloses the limitations of Claim 10 and 26 above.

Peng does not explicitly disclose "wherein the act of ascertaining whether the identified record has bee replicated in or deleted from the remote application data store through push synchronization includes examining a coordination flag associated with the identified record, a set coordination flag indicating that the identified record, in its current form, has been replicated in or deleted from the remote application data store through push synchronization and a reset coordination flag indicating that the identified record, in its current form, has not."

Guturu discloses wherein the act of ascertaining whether the identified record has bee replicated in or deleted from the remote application data store through push synchronization includes examining a coordination flag associated with the identified record, a set coordination flag indicating that the identified record, in its current form, has been replicated in or deleted from the remote application data store through push synchronization and a reset coordination flag indicating that the identified record, in its current form, has not. (col 4, lines 55-68)

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Peng such that a coordination flag is set for the pushed record. One of ordinary skill in the art would have been motivated to do this because it would provide a system that can detect whether the an update has already taken place (Guturu: col 4, lines 30-65).

Referring to Claim 36:

Peng discloses a coordinated user-initiated synchronization system, comprising a synch module in communication with a synch engine (Fig 2; col 9, lines 30-40; col 3, lines 1-9), the

synch module operable to detect the creation, modification, or deletion of or to a record and to

modify a change counter according to the detection (col 16, lines 10-30),

Peng does not explicitly disclose "the synch engine operable to examine the change

counter and a coordination flag associated with the record and to issue instructions to replicate or

delete the record on a remote system based upon the examination".

Guturu discloses "the synch engine operable to examine the change counter and a

coordination flag associated with the record and to issue instructions to replicate or delete the

record on a remote system based upon the examination (col 5, lines 10-25).

At the time the invention was made, it would have been obvious to a person of ordinary

skill in the art to modify Peng such that he synch engine operable to examine the change counter

and a coordination flag associated with the record and to issue instructions to replicate or delete

the record on a remote system based upon the examination. One of ordinary skill in the art

would have been motivated to do this because it would provide a system that can detect whether

the an update has already taken place (Guturu: col 4, lines 30-65)

Referring to Claims 37 and 41:

Peng in view of Guturu disclose the limitations of Claim 36 above. Guturu further

discloses the coordination flag has a status set or reset and wherein the synch engine is further

operable to issue instructions to replicate or delete the record on the remote system only if the

coordination flag is reset (col 4, lines 40-50; 55-65; col 5, lines 10-25).

Referring to Claim 38 and 43:

Peng in view of Guturu disclose the limitations of Claim 36 above. Guturu further discloses the record is associated with a global change counter controlled by the synch engine and a local change counter controlled by the synch module, and wherein the synch engine is further operable to modify a value of the global change counter to equal a value for the local change counter upon instructions to replicate a record (col 7, lines 35-45; Fig 4).

Referring to Claim 39, 44:

Peng discloses a coordinated push and user initiated synchronization system, comprising: a push module and a reception module (Fig 2, col 9, lines 30-40), the push module operable to detect the creation, modification, or deletion of a record, and to push the record and a local change counter associated with the record to the reception module (col 16, lines 10-30), the reception module operable to compare the pushed local change counter with a remote change counter associated with the record and to update a remote application data store using the pushed record based upon the comparison (col 17, lines 5-65); a synch module operable to detect the creation, modification, or deletion of the record, to modify the local change counter based upon the detection (Fig 2; col 9, lines 30-40; col 3, lines 1-9; col 16, lines 10-30); and

Peng does not explicitly disclose "a synch module to reset the coordination flag; a synch engine in communication the local synch module, the synch engine operable to compare the local change counter with a global change counter associated with the record and to examine the coordination flag and to issue instructions to replicate or delete the record in the remote application data store based upon the comparison and examination."

Guturu discloses a synch module to reset the coordination flag (col 6, lines 40-68); a

synch engine in communication the local synch module, the synch engine operable to compare

the local change counter with a global change counter associated with the record and to examine

the coordination flag and to issue instructions to replicate or delete the record in the remote

application data store based upon the comparison and examination (col 5, lines 10-25).

At the time the invention was made, it would have been obvious to a person of ordinary

skill in the art to modify Peng such that he synch engine operable to examine the change counter

and a coordination flag associated with the record and to issue instructions to replicate or delete

the record on a remote system based upon the examination. One of ordinary skill in the art

would have been motivated to do this because it would provide a system that can detect whether

the an update has already taken place (Guturu: col 4, lines 30-65)

Referring to Claim 40:

Peng in view of Guturu disclose the limitations of Claim 39 above. Guturu further

discloses local and remote change counters each have a value and the reception module is

operable to compare those values and update the remote application data store only if the values

are not equal (col 17, lines 5-65).

Referring to Claim 42:

Peng in view of Guturu disclose the limitations of Claim 39 above. Guturu further

discloses wherein the push module is further operable to set the coordination flag upon updating

the remote application data store with the pushed record (col 4, lines 60-66).

Prior Art

6.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

US 20020059299 issued to Spaey, Frederic. Spaey discloses a data processing method and

system including a plurality of databases linked by at least one communication channels, a

synchronization set which defines the objects or records to be synchronized between the

plurality of databases, and a synchronizer for each database which controls and monitors the

synchronization between databases and accesses a local database to which the synchronizer is

connected. Each synchronizer includes a communications module, which monitors and controls

the communication with other databases and at least one table synchronizer, which controls and

monitors the synchronization of the local database and access to the local database. Each table

synchronizer includes a table synchronizer engine which handle the synchronization

management for its table synchronizer, a plug-in which handle the generic database

communication for its table synchronizer, and a driver which controls communication with the

local database. The data processing method synchronizes data records of a source database and

a destination database. The method includes defining a synchronization set for data records

existing in the source database, synchronizing the source database and the destination database

based on the synchronization set, and changing the definition of the synchronization set while

synchronizing the source database and the destination database.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is 1703-305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on 1703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at.866-217-9197 (toll-free).

Monplaisir Hamilton

ALFORD KINDRED
PRIMARY EXAMINER